

Received
Office of Oil & Gas

OCT 30 2014

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WR-35
Rev. 8/23/13

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State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 043 - 03450 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name AUSTIN GRIFFITH Field/Pool Name GRIFFITHSVILLE
Farm name ALLEN, TERRY & DAWNA Well Number 102
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,231,276 M Easting 415,926 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,231,175 M Easting 415,827 M

Elevation (ft) 861' GL Type of Well ☒ New ☐ Existing Type of Report ☐ Interim ☒ Final
Permit Type ☐ Deviated ☐ Horizontal ☐ Horizontal 6A ☒ Vertical Depth Type ☐ Deep ☒ Shallow
Type of Operation ☐ Convert ☐ Deepen ☒ Drill ☐ Plug Back ☐ Redrilling ☐ Rework ☐ Stimulate
Well Type ☐ Brine Disposal ☐ CBM ☐ Gas ☐ Oil ☒ Secondary Recovery ☐ Solution Mining ☐ Storage ☐ Other _____
Type of Completion ☒ Single ☐ Multiple Fluids Produced ☐ Brine ☐ Gas ☐ NGL ☒ Oil ☐ Other _____
Drilled with ☐ Cable ☒ Rotary

Drilling Media Surface hole ☒ Air ☐ Mud ☒ Fresh Water Intermediate hole ☒ Air ☐ Mud ☒ Fresh Water ☐ Brine
Production hole ☒ Air ☐ Mud ☐ Fresh Water ☒ Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 5/31/2013 Date drilling commenced 9/12/14 Date drilling ceased 9/18/14
Date completion activities began 9/29/14 Date completion activities ceased 10/1/14
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 320' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1010', 1300' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 438'- 445' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

OCT 30 2014

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API 47- 043 - 03450 Farm name ALLEN, TERRY & DAWNA Well number 102

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	549'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2579.75'	New	J-55		Y
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 25 sks to surface on 7" surface cement job. Circulated Est. 7 sks to surface on 4 1/2" cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	130	15.6	1.18	153	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	90/125	13.2/14.2	1.64/1.27	149/159	157'	8
Tubing							

Drillers TD (ft) 2600' Loggers TD (ft) 2602'
 Deepest formation penetrated Berea Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 650'

Check all wireline logs run ☒ caliper ☒ density ☒ deviated/directional ☒ induction
☒ neutron ☒ resistivity ☒ gamma ray ☒ temperature ☐ sonic

Well cored ☐ Yes ☒ No Conventional Sidewall Were cuttings collected ☒ Yes ☐ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

6 Centralizers every 84' from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS _____

WERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED _____

Well number 102[illegible]

Please insert additional pages as applicable.

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)

DEPTHS

Berea 2332'- 2352' TVD 2382'- 2400' MD

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Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☐ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST hrs

OPEN FLOW Gas mcfpd Oil bpd NGL bpd Water bpd GAS MEASURED BY
☐ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	438	0	438	
Pittsburgh Coal	438	445	438	445	
Sand/Shale	445	1610	445	1638	
Big Lime	1610	1820	1638	1852	
Big Injun	1820	1918	1852	1961	
Shale	1918	2312	1961	2362	
Coffee Shale	2312	2332	2362	2382	
Berea	2332	2352	2382	2404	
Shale	2352	2505	2404	2560	
TD	2505		2560		Drilled directional S 47° W a distance of 409'

Please insert additional pages as applicable.

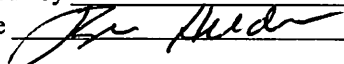
Drilling Contractor Decker Drilling
Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International
Address 777 North River Avenue City Weston State WV Zip 26452

Cementing Company Universal Services
Address 5252 Rt 1428 City Allen State KY Zip 41601

Stimulating Company Producers Service Corp.
Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107
Signature  Title Operations manger Date 10/15/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

HG Energy, LLC

Lincoln County, West Virginia

Austin Griffith #102

Austin Griffith #102

Wellbore #1

Survey: MWD

Survey Report - Geographic

15 October, 2014

Received
Office of Oil & Gas

OCT 30 2014



DDC

Survey Report - Geographic



Company:	HG Energy, LLC	Local Co-ordinate Reference:	Well Austin Griffith #102
Project:	Lincoln County, West Virginia	TVD Reference:	WELL @ 869.0usft (Decker #9)
Site:	Austin Griffith #102	MD Reference:	WELL @ 869.0usft (Decker #9)
Well:	Austin Griffith #102	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Lincoln County, West Virginia		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	NAD83 West Virginia - HARN		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Austin Griffith #102		
Site Position:		Northing:	13,882,076.02 usft
From:	Lat/Long	Easting:	1,364,544.39 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	38° 13' 31.600 N
		Longitude:	81° 57' 38.400 W
		Grid Convergence:	-0.59 °

Well	Austin Griffith #102		
Well Position	+N/-S	0.0 usft	Northing: 13,882,076.01 usft
	+E/-W	0.0 usft	Easting: 1,364,544.39 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	38° 13' 31.600 N
		Longitude:	81° 57' 38.400 W
		Ground Level:	861.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	9/10/2014	-7.43
			Dip Angle (°) 66.09
			Field Strength (nT) 51,843

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°) 226.50

Survey Program	Date 9/30/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
650.0	2,563.0	MWD (Wellbore #1)	MWD default
			Description MWD - Standard

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	13,882,076.01	1,364,544.39	38° 13' 31.600 N	81° 57' 38.400 W	
650.0	0.00	0.00	650.0	0.0	0.0	13,882,076.01	1,364,544.39	38° 13' 31.600 N	81° 57' 38.400 W	
FIRST SURVEY @ 650' MD / 650' TVD										
685.0	1.00	136.60	685.0	-0.2	0.2	13,882,075.78	1,364,544.60	38° 13' 31.598 N	81° 57' 38.397 W	
715.0	0.80	147.40	715.0	-0.6	0.5	13,882,075.42	1,364,544.89	38° 13' 31.594 N	81° 57' 38.394 W	
745.0	0.70	197.20	745.0	-0.9	0.6	13,882,075.07	1,364,544.95	38° 13' 31.591 N	81° 57' 38.393 W	
775.0	2.10	227.20	775.0	-1.5	0.1	13,882,074.52	1,364,544.49	38° 13' 31.585 N	81° 57' 38.399 W	
805.0	3.80	236.90	804.9	-2.4	-1.1	13,882,073.60	1,364,543.26	38° 13' 31.576 N	81° 57' 38.414 W	
835.0	5.80	241.90	834.8	-3.7	-3.3	13,882,072.34	1,364,541.09	38° 13' 31.563 N	81° 57' 38.441 W	
865.0	7.30	237.50	864.6	-5.4	-6.2	13,882,070.61	1,364,538.14	38° 13' 31.546 N	81° 57' 38.478 W	
895.0	8.20	231.70	894.4	-7.8	-9.5	13,882,068.26	1,364,534.85	38° 13' 31.522 N	81° 57' 38.518 W	
925.0	9.40	229.00	924.0	-10.7	-13.1	13,882,065.32	1,364,531.33	38° 13' 31.493 N	81° 57' 38.562 W	

DDC

Survey Report - Geographic



Company:	HG Energy, LLC	Local Co-ordinate Reference:	Well Austin Griffith #102
Project:	Lincoln County, West Virginia	TVD Reference:	WELL @ 869.0usft (Decker #9)
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Well:	Austin Griffith #102	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
955.0	10.80	221.30	953.5	-14.4	-16.8	13,882,061.60	1,364,527.62	38° 13' 31.456 N	81° 57' 38.608 W	
985.0	12.10	226.80	983.0	-18.7	-20.9	13,882,057.34	1,364,523.47	38° 13' 31.413 N	81° 57' 38.660 W	
1,015.0	13.60	229.70	1,012.2	-23.1	-25.9	13,882,052.90	1,364,518.49	38° 13' 31.369 N	81° 57' 38.722 W	
1,045.0	14.80	232.10	1,041.3	-27.7	-31.6	13,882,048.27	1,364,512.78	38° 13' 31.322 N	81° 57' 38.793 W	
1,075.0	15.70	232.80	1,070.2	-32.5	-37.9	13,882,043.46	1,364,506.52	38° 13' 31.274 N	81° 57' 38.870 W	
1,105.0	16.20	233.40	1,099.1	-37.5	-44.5	13,882,038.51	1,364,499.93	38° 13' 31.225 N	81° 57' 38.952 W	
1,135.0	16.50	231.30	1,127.9	-42.7	-51.1	13,882,033.35	1,364,493.24	38° 13' 31.173 N	81° 57' 39.036 W	
1,165.0	16.80	229.30	1,156.6	-48.1	-57.8	13,882,027.86	1,364,486.63	38° 13' 31.118 N	81° 57' 39.118 W	
1,195.0	16.90	225.40	1,185.3	-54.0	-64.1	13,882,021.97	1,364,480.24	38° 13' 31.059 N	81° 57' 39.197 W	
1,225.0	17.60	223.40	1,214.0	-60.4	-70.4	13,882,015.62	1,364,474.02	38° 13' 30.996 N	81° 57' 39.274 W	
1,255.0	17.80	223.50	1,242.5	-67.0	-76.6	13,882,008.99	1,364,467.75	38° 13' 30.929 N	81° 57' 39.352 W	
1,285.0	17.40	221.90	1,271.1	-73.7	-82.8	13,882,002.33	1,364,461.59	38° 13' 30.863 N	81° 57' 39.428 W	
1,315.0	16.90	218.70	1,299.8	-80.4	-88.5	13,881,995.59	1,364,455.87	38° 13' 30.796 N	81° 57' 39.499 W	
1,345.0	17.10	220.40	1,328.5	-87.2	-94.1	13,881,988.83	1,364,450.29	38° 13' 30.728 N	81° 57' 39.568 W	
1,375.0	17.50	222.80	1,357.1	-93.8	-100.0	13,881,982.16	1,364,444.36	38° 13' 30.662 N	81° 57' 39.642 W	
1,405.0	17.70	224.40	1,385.7	-100.4	-106.3	13,881,975.59	1,364,438.11	38° 13' 30.596 N	81° 57' 39.719 W	
1,435.0	17.10	224.40	1,414.4	-106.8	-112.6	13,881,969.18	1,364,431.83	38° 13' 30.532 N	81° 57' 39.797 W	
1,465.0	16.20	225.00	1,443.1	-112.9	-118.6	13,881,963.07	1,364,425.79	38° 13' 30.471 N	81° 57' 39.872 W	
1,495.0	16.20	224.60	1,471.9	-118.9	-124.5	13,881,957.13	1,364,419.89	38° 13' 30.412 N	81° 57' 39.945 W	
1,525.0	16.50	224.30	1,500.7	-124.9	-130.4	13,881,951.10	1,364,413.98	38° 13' 30.351 N	81° 57' 40.018 W	
1,555.0	16.60	227.20	1,529.5	-130.9	-136.5	13,881,945.14	1,364,407.86	38° 13' 30.292 N	81° 57' 40.094 W	
1,585.0	15.40	228.70	1,558.3	-136.4	-142.7	13,881,939.60	1,364,401.72	38° 13' 30.236 N	81° 57' 40.171 W	
1,615.0	14.70	228.40	1,587.3	-141.6	-148.5	13,881,934.44	1,364,395.88	38° 13' 30.185 N	81° 57' 40.243 W	
1,645.0	14.90	226.00	1,616.3	-146.8	-154.1	13,881,929.24	1,364,390.26	38° 13' 30.133 N	81° 57' 40.313 W	
1,675.0	16.10	226.40	1,645.2	-152.3	-159.9	13,881,923.69	1,364,384.47	38° 13' 30.077 N	81° 57' 40.385 W	
1,705.0	17.60	228.90	1,673.9	-158.2	-166.3	13,881,917.84	1,364,378.04	38° 13' 30.019 N	81° 57' 40.465 W	
1,735.0	18.10	227.10	1,702.4	-164.3	-173.2	13,881,911.68	1,364,371.21	38° 13' 29.957 N	81° 57' 40.549 W	
1,765.0	18.10	228.20	1,731.0	-170.6	-180.1	13,881,905.41	1,364,364.32	38° 13' 29.895 N	81° 57' 40.635 W	
1,795.0	17.90	227.10	1,759.5	-176.8	-186.9	13,881,899.16	1,364,357.47	38° 13' 29.832 N	81° 57' 40.720 W	
1,825.0	17.90	228.90	1,788.0	-183.0	-193.8	13,881,892.99	1,364,350.62	38° 13' 29.770 N	81° 57' 40.805 W	
1,855.0	17.20	227.40	1,816.6	-189.0	-200.5	13,881,886.96	1,364,343.88	38° 13' 29.710 N	81° 57' 40.889 W	
1,885.0	16.10	228.30	1,845.4	-194.8	-206.9	13,881,881.19	1,364,337.51	38° 13' 29.652 N	81° 57' 40.968 W	
1,915.0	14.90	225.60	1,874.3	-200.3	-212.7	13,881,875.72	1,364,331.65	38° 13' 29.598 N	81° 57' 41.041 W	
1,945.0	14.20	225.80	1,903.3	-205.5	-218.1	13,881,870.46	1,364,326.25	38° 13' 29.545 N	81° 57' 41.108 W	
1,975.0	13.30	223.70	1,932.5	-210.6	-223.2	13,881,865.40	1,364,321.23	38° 13' 29.495 N	81° 57' 41.170 W	
2,005.0	12.50	222.00	1,961.7	-215.5	-227.7	13,881,860.49	1,364,316.67	38° 13' 29.446 N	81° 57' 41.226 W	
2,035.0	12.00	223.90	1,991.0	-220.2	-232.1	13,881,855.83	1,364,312.34	38° 13' 29.399 N	81° 57' 41.280 W	
2,065.0	11.20	223.00	2,020.4	-224.6	-236.2	13,881,851.45	1,364,308.19	38° 13' 29.355 N	81° 57' 41.331 W	
2,095.0	10.20	221.10	2,049.9	-228.7	-239.9	13,881,847.32	1,364,304.46	38° 13' 29.314 N	81° 57' 41.378 W	
2,125.0	10.00	218.20	2,079.4	-232.7	-243.3	13,881,843.27	1,364,301.10	38° 13' 29.274 N	81° 57' 41.419 W	
2,155.0	9.40	217.60	2,109.0	-236.7	-246.4	13,881,839.28	1,364,297.99	38° 13' 29.234 N	81° 57' 41.458 W	
2,185.0	8.50	218.20	2,138.6	-240.4	-249.3	13,881,835.60	1,364,295.13	38° 13' 29.197 N	81° 57' 41.493 W	
2,215.0	8.80	222.20	2,168.3	-243.8	-252.2	13,881,832.16	1,364,292.21	38° 13' 29.163 N	81° 57' 41.529 W	
2,245.0	10.10	229.60	2,197.9	-247.3	-255.7	13,881,828.75	1,364,288.67	38° 13' 29.129 N	81° 57' 41.573 W	
2,275.0	11.80	232.10	2,227.3	-250.8	-260.1	13,881,825.16	1,364,284.25	38° 13' 29.093 N	81° 57' 41.628 W	
2,305.0	12.20	234.70	2,256.7	-254.6	-265.2	13,881,821.45	1,364,279.24	38° 13' 29.056 N	81° 57' 41.690 W	
2,335.0	12.40	235.00	2,286.0	-258.2	-270.4	13,881,817.77	1,364,274.01	38° 13' 29.019 N	81° 57' 41.755 W	
2,365.0	14.10	234.30	2,315.2	-262.2	-276.0	13,881,813.79	1,364,268.41	38° 13' 28.979 N	81° 57' 41.825 W	
2,395.0	14.90	235.10	2,344.2	-266.6	-282.1	13,881,809.45	1,364,262.28	38° 13' 28.935 N	81° 57' 41.901 W	
2,425.0	13.90	233.50	2,373.3	-270.9	-288.2	13,881,805.10	1,364,256.22	38° 13' 28.892 N	81° 57' 41.977 W	
2,455.0	13.00	232.80	2,402.5	-275.1	-293.8	13,881,800.92	1,364,250.63	38° 13' 28.850 N	81° 57' 42.046 W	
2,485.0	11.70	231.00	2,431.8	-279.0	-298.8	13,881,796.96	1,364,245.58	38° 13' 28.810 N	81° 57' 42.109 W	
2,508.0	11.10	230.60	2,454.3	-281.9	-302.3	13,881,794.09	1,364,242.06	38° 13' 28.781 N	81° 57' 42.153 W	
2,563.0	11.10	230.60	2,508.3	-288.6	-310.5	13,881,787.37	1,364,233.87	38° 13' 28.714 N	81° 57' 42.255 W	

TD @ 2563' MD / 2508' TVD

DDC
Survey Report - Geographic



Company:	HG Energy, LLC	Local Co-ordinate Reference:	Well Austin Griffith #102
Project:	Lincoln County, West Virginia	TVD Reference:	WELL @ 869.0usft (Decker #9)
Site:	Austin Griffith #102	MD Reference:	WELL @ 869.0usft (Decker #9)
Well:	Austin Griffith #102	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
650.0	650.0	0.0	0.0	FIRST SURVEY @ 650' MD / 650' TVD
2,563.0	2,508.3	-288.6	-310.5	TD @ 2563' MD / 2508' TVD

Checked By: _____	Approved By: _____	Date: _____
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Office of Oil & Gas
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OCT 30 2014

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Rev. 8/23/13

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State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 043 - 03451 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name AUSTIN GRIFFITH Field/Pool Name GRIFFITHSVILLE
Farm name ALLEN, TERRY & DAWNA Well Number 103
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,231,280 M Easting 415,930 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 861' GL Type of Well ☒ New ☐ Existing Type of Report ☐ Interim ☒ Final
Permit Type ☐ Deviated ☐ Horizontal ☐ Horizontal 6A ☒ Vertical Depth Type ☐ Deep ☒ Shallow
Type of Operation ☐ Convert ☐ Deepen ☒ Drill ☐ Plug Back ☐ Redrilling ☐ Rework ☐ Stimulate
Well Type ☐ Brine Disposal ☐ CBM ☐ Gas ☐ Oil ☒ Secondary Recovery ☐ Solution Mining ☐ Storage ☐ Other _____
Type of Completion ☒ Single ☐ Multiple Fluids Produced ☐ Brine ☐ Gas ☐ NGL ☒ Oil ☐ Other _____
Drilled with ☐ Cable ☒ Rotary

Drilling Media Surface hole ☒ Air ☐ Mud ☒ Fresh Water Intermediate hole ☒ Air ☐ Mud ☒ Fresh Water ☐ Brine
Production hole ☒ Air ☐ Mud ☐ Fresh Water ☒ Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 5/31/2013 Date drilling commenced 7/10/14 Date drilling ceased 7/12/14
Date completion activities began 7/28/14 Date completion activities ceased 7/29/14
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 320' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1010', 1300' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 438'- 445' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

OCT 30 2014

WR-35
Rev. 8/23/13Page 2 of 4API 47- 043 - 03451 Farm name ALLEN, TERRY & DAWNA Well number 103

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade 'wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	548'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2572.75'	New	J-55		N
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	130	15.6	1.18	153	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	150	14.2	1.27	191	672'	8
Tubing							

Drillers TD (ft) 2490' Loggers TD (ft) 2496'Deepest formation penetrated Berea Plug back to (ft) N/APlug back procedure N/AKick off depth (ft) N/A

Check all wireline logs run ☒ caliper ☒ density ☒ deviated/directional ☒ induction
☒ neutron ☒ resistivity ☒ gamma ray ☒ temperature ☐ sonic

Well cored ☐ Yes ☒ No Conventional Sidewall Were cuttings collected ☒ Yes ☐ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

6 Centralizers every 84' from bottom on 4 1/2". Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS _____WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS _____WERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED _____

API 47- 043 - 03451 Farm name ALLEN, TERRY & DAWNA Well number 103

PERFORATION RECORD

[illegible]

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

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API 47- 043 - 03451 Farm name ALLEN, TERRY & DAWNA Well number 103

PRODUCING FORMATION(S)

DEPTHS

Berea 2338'- 2348' TVD MD

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Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☐ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST hrs

OPEN FLOW Gas mcfpd Oil bpd NGL bpd Water bpd
GAS MEASURED BY ☐ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	438	0		
Pittsburgh Coal	438	445			
Sand/Shale	445	1609			
Big Lime	1609	1814			
Big Injun	1814	1918			
Shale	1918	2314			
Coffee Shale	2314	2334			
Berea	2334	2354			
Shale	2354	2490			
TD	2490				

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling
Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International
Address 777 North River Avenue City Weston State WV Zip 26452

Cementing Company Universal Services
Address 5252 Rt 1428 City Allen State KY Zip 41601

Stimulating Company Producers Service Corp.
Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107
Signature  Title Operations Manager Date 10/15/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

304 771 5432



740-454-6253

CUSTOMER PO#

[illegible]

Customer Approval: _____

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Page 1 of 4

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-043-03453 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name AUSTIN GRIFFITH Field/Pool Name GRIFFITHSVILLE
Farm name MCCLURE, ANDY J. & REBECCA Well Number 105
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,231,038 M Easting 416,097 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 840' GL Type of Well ☒ New ☐ Existing Type of Report ☐ Interim ☒ Final
Permit Type ☐ Deviated ☐ Horizontal ☐ Horizontal 6A ☒ Vertical Depth Type ☐ Deep ☒ Shallow
Type of Operation ☐ Convert ☐ Deepen ☒ Drill ☐ Plug Back ☐ Redrilling ☐ Rework ☐ Stimulate
Well Type ☐ Brine Disposal ☐ CBM ☐ Gas ☐ Oil ☒ Secondary Recovery ☐ Solution Mining ☐ Storage ☐ Other _____
Type of Completion ☒ Single ☐ Multiple Fluids Produced ☐ Brine ☐ Gas ☐ NGL ☒ Oil ☐ Other _____
Drilled with ☐ Cable ☒ Rotary

Drilling Media Surface hole ☒ Air ☐ Mud ☒ Fresh Water Intermediate hole ☒ Air ☐ Mud ☒ Fresh Water ☐ Brine
Production hole ☒ Air ☐ Mud ☐ Fresh Water ☒ Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 6/17/2013 Date drilling commenced 7/29/14 Date drilling ceased 8/1/14
Date completion activities began 8/4/14 Date completion activities ceased 8/6/14
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft N/A Open mine(s) (Y/N) depths N
Salt water depth(s) ft 900', 1270' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 400'-406' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

OCT 30 2014

Page 2 of 4WR-35
Rev. 8/23/13API 47- 043 - 03453 Farm name MCCLURE, ANDY J. & REBECCA Well number 105

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	506'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2482.7'	New	J-55		Y
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 10 sks to surface on 7" surface cement job. Circulated Est. 45 sks to surface on 4 1/2" cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	125	15.6	1.18	148	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	85/125	13.2/14.2	1.64/1.27	139/159	12'	8
Tubing							

Drillers TD (ft) 2510' Loggers TD (ft) 2516'Deepest formation penetrated Berea Plug back to (ft) N/APlug back procedure N/AKick off depth (ft) N/A

Check all wireline logs run ☒ caliper ☒ density ☒ deviated/directional ☒ induction
☒ neutron ☒ resistivity ☒ gamma ray ☒ temperature ☐ sonic

Well cored ☐ Yes ☒ No Conventional Sidewall Were cuttings collected ☒ Yes ☐ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

6 Centralizers every 84' from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS _____WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS _____WERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED _____

Farm name MCCLURE, ANDY J. & REBECCA Well number 105

PERFORATION RECORD

[illegible]

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

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API 47- 043 - 03453

Farm name MCCLURE, ANDY J. & REBECCA Well number 105

PRODUCING FORMATION(S)

DEPTHS

Berea 2317'- 2330' TVD MD

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Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☐ Open Flow

OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST hrs

OPEN FLOW Gas mcfpd Oil bpd NGL bpd Water bpd
GAS MEASURED BY ☐ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	400	0		
Pittsburgh Coal	400	406			
Sand/Shale	406	1592			
Big Lime	1592	1800			
Big Injun	1800	1903			
Shale	1903	2294			
Coffee Shale	2294	2314			
Berea	2314	2334			
Shale	2334	2510			
TD	2510				

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling

Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International

Address 777 North River Avenue City Weston State WV Zip 26452

Cementing Company Universal Services

Address 5252 Rt 1428 City Allen State KY Zip 41601

Stimulating Company Producers Service Corp.

Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman

Telephone

Signature  Title Operations Manger Date 10/15/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

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State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 043 - 03456 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name J.A. FOWLER Field/Pool Name GRIFFITHSVILLE
Farm name MCCLURE, ANDY J. & REBECCA Well Number 108
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,234,455 M Easting 416,276 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1,063' GL Type of Well ☒ New ☐ Existing Type of Report ☐ Interim ☒ Final
Permit Type ☐ Deviated ☐ Horizontal ☐ Horizontal 6A ☒ Vertical Depth Type ☐ Deep ☒ Shallow
Type of Operation ☐ Convert ☐ Deepen ☒ Drill ☐ Plug Back ☐ Redrilling ☐ Rework ☐ Stimulate
Well Type ☐ Brine Disposal ☐ CBM ☐ Gas ☐ Oil ☒ Secondary Recovery ☐ Solution Mining ☐ Storage ☐ Other _____
Type of Completion ☒ Single ☐ Multiple Fluids Produced ☐ Brine ☐ Gas ☐ NGL ☒ Oil ☐ Other _____
Drilled with ☐ Cable ☒ Rotary

Drilling Media Surface hole ☒ Air ☐ Mud ☒ Fresh Water Intermediate hole ☒ Air ☐ Mud ☒ Fresh Water ☐ Brine
Production hole ☒ Air ☐ Mud ☐ Fresh Water ☒ Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 6/17/2013 Date drilling commenced 7/17/14 Date drilling ceased 7/23/14
Date completion activities began 7/28/14 Date completion activities ceased 7/29/14
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 440' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1240', 1420' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 647'-652' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

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OCT 30 2014

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API 47- 043 - 03456 Farm name MCCLURE, ANDY J. & REBECCA Well number 108

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	759'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2716.75'	New	J-55		Y
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job. Circulated est. 18 sks to surface on 4 1/2" cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	180	15.6	1.18	212	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	105/125	13.2/14.2	1.64/1.27	172/159	110'	8
Tubing							

Drillers TD (ft) 2720' Loggers TD (ft) 2732'
 Deepest formation penetrated Berea Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) N/A

Check all wireline logs run ☒ caliper ☒ density ☒ deviated/directional ☒ induction
☒ neutron ☒ resistivity ☒ gamma ray ☒ temperature ☐ sonic

Well cored ☐ Yes ☒ No Conventional Sidewall Were cuttings collected ☒ Yes ☐ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
6 Centralizers every 84 from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS _____

WERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED _____

Farm name MCCLURE, ANDY J. & REBECCA Well number 108

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Please insert additional pages as applicable.

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

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API 47- 043 - 03456 Farm name MCCLURE, ANDY J. & REBECCA Well number 108

PRODUCING FORMATION(S)

DEPTHS

Berea 2574'-2588' TVD MD

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Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☐ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST hrs

OPEN FLOW Gas mcfpd Oil bpd NGL bpd Water bpd
GAS MEASURED BY ☐ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	647	0		
Pittsburgh Coal	647	652			
Sand/Shale	652	1830			
Big Lime	1830	2043			
Big Injun	2043	2143			
Shale	2143	2550			
Coffee Shale	2550	2572			
Berea	2572	2588			
Shale	2588	2720			
TD	2720				

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling

Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International

Address 777 North River Avenue City Weston State WV Zip 26452

Cementing Company Universal Services

Address 5252 Rt 1428 City Allen State KY Zip 41601

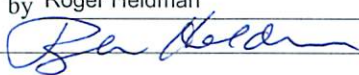
Stimulating Company Producers Service Corp.

Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman

Telephone 304-420-1107

Signature  Title Operations Manager Date 10/14/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

Prepared for:
HG Energy
Dustin Hendershot
304 771 5432



Prepared by:
Producers Service Corp
Chris Bryan
109 S. Graham St.
Zanesville, OH 43702
740-454-6253

INVOICE #: 16761

WELL NAME: J.A. Fowler #108

STATE & COUNTY: Lincoln, WV

TOWNSHIP/FIELD: Griffithsville

DATE of SERVICE: 7/29/2014

CUSTOMER PO#

[illegible]

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State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-043-03457 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name J.A. FOWLER Field/Pool Name GRIFFITHSVILLE
Farm name MCCLURE, ANDY J. & REBECCA Well Number 109
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,231,299 M Easting 416,244 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 956' GL Type of Well ☒ New ☐ Existing Type of Report ☐ Interim ☒ Final
Permit Type ☐ Deviated ☐ Horizontal ☐ Horizontal 6A ☒ Vertical Depth Type ☐ Deep ☒ Shallow
Type of Operation ☐ Convert ☐ Deepen ☒ Drill ☐ Plug Back ☐ Redrilling ☐ Rework ☐ Stimulate
Well Type ☐ Brine Disposal ☐ CBM ☐ Gas ☐ Oil ☒ Secondary Recovery ☐ Solution Mining ☐ Storage ☐ Other _____
Type of Completion ☒ Single ☐ Multiple Fluids Produced ☐ Brine ☐ Gas ☐ NGL ☒ Oil ☐ Other _____
Drilled with ☐ Cable ☒ Rotary

Drilling Media Surface hole ☒ Air ☐ Mud ☒ Fresh Water Intermediate hole ☒ Air ☐ Mud ☒ Fresh Water ☐ Brine
Production hole ☒ Air ☐ Mud ☐ Fresh Water ☒ Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 6/17/2013 Date drilling commenced 7/23/14 Date drilling ceased 7/26/14
Date completion activities began 8/4/14 Date completion activities ceased 8/6/14
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft N/A Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1040', 1140' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 508'-513' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

OCT 30 2014

Page 2 of 4WR-35
Rev. 8/23/13API 47- 043 - 03457Farm name MCCLURE, ANDY J. & REBECCA Well number 109

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	633'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2544.05	New	J-55		N
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	150	15.6	1.18	177	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	100/125	13.2/14.2	1.64/1.27	164/159	433'	8
Tubing							

Drillers TD (ft) 2580'Loggers TD (ft) 2582'Deepest formation penetrated BereaPlug back to (ft) N/APlug back procedure N/AKick off depth (ft) N/A

Check all wireline logs run

☒ caliper☒ density☒ deviated/directional☒ induction☒ neutron☒ resistivity☒ gamma ray☒ temperature☐ sonicWell cored ☐ Yes ☒ No

Conventional

Sidewall

Were cuttings collected ☒ Yes ☐ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

6 Centralizers every 84 from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILSWAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILSWERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED

Farm name MCCLURE, ANDY J. & REBECCA Well number 109

[illegible]

STIMULATION INFORMATION PER STAGE

[illegible]

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OCT 30 2014

API 47- 043 - 03457

Farm name MCCLURE, ANDY J. & REBECCA Well number 109

PRODUCING FORMATION(S)

DEPTHS

Berea 2413'-2426' TVD MD

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Office of Oil & Gas

OCT 30 2014

Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☐ Open Flow

OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST hrs

OPEN FLOW Gas mcfpd Oil bpd NGL bpd Water bpd
GAS MEASURED BY ☐ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	508	0		
Pittsburgh Coal	508	513			
Sand/Shale	513	1689			
Big Lime	1689	1900			
Big Injun	1900	1998			
Shale	1998	2390			
Coffee Shale	2390	2410			
Berea	2410	2429			
Shale	2429	2580			
TD	2580				

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling

Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International

Address 777 North River Avenue City Weston State WV Zip 26452

Cementing Company Universal Services

Address 5252 Rt 1428 City Allen State KY Zip 41601

Stimulating Company Producers Service Corp.

Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman

Telephone 304-420-1107

Signature  Title Operations Manager Date 10/14/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

Rodger Heldman



Prepared by:
Producers Service Corp
Chris Bryan
109 S. Graham St.
Zanesville, OH 43702
740-454-6253

INVOICE #:	16766
WELL NAME:	JA Fowler #109
STATE & COUNTY:	Lincoln, WV
TOWNSHIP/FIELD:	Griffithsville
DATE of SERVICE:	8/6/2014
CUSTOMER PO#	

[illegible]

TC

Customer Approval: _____

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Office of Oil & Gas

OCT 30 2014

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